IN THE CLAIMS:

Set forth below in ascending order, with status identifiers, is a complete listing of all claims currently under examination. Changes to any amended claims are indicated by strikethrough, double brackets, and underlining. This listing also reflects any cancellation and/or addition of claims.

1. (Currently amended) A system for coating a substrate, the system comprising:

a vacuum chamber;

a rotatable tube positioned inside the vacuum chamber;

a shaft connected to the rotatable tube, the shaft partially outside at least a first side of the vacuum chamber;

[[a]]at least one bearing positioned outside the vacuum chamber, the at least one bearing configured to rotatably engage the shaft, wherein the at least one bearing is a closest bearing, measured along an axis of the shaft, to the first side of the vacuum chamber;

a seal positioned between the at least one bearing and the vacuum chamber, the seal configured to provide a seal between the vacuum chamber and the shaft; and

a power coupler configured to deliver power to the rotatable tube, the power coupler positioned closer, measured along the axis of the shaft, to a center of the vacuum chamber than the at least one bearing ~~between the bearing and the seal~~ to thereby limit the current that flows through the at least one bearing.

2. (Original) The system of claim 1, wherein the power coupler is positioned inside the vacuum chamber.

3. (Original) The system of claim 1, wherein the rotatable tube and the shaft are integrated.

4. (Canceled)

5. (Original) The system of claim 1, further comprising:

a drive system configured to rotate the shaft.

6. (Currently amended) The system of claim 1, wherein the at least one bearing comprises ceramic balls.

7. (Currently amended) The system of claim 1, wherein the at least one bearing comprises ceramic needles.

8. (Currently amended) The system of claim 1, wherein the at least one bearing comprises Mp35N.

9. (Original) The system of claim 1, wherein the power coupler is positioned outside the vacuum chamber.

10. (Original) The system of claim 1, wherein the power coupler comprises a water-cooled slip ring connector.

11. (Original) The system of claim 1, wherein the power coupler comprises a liquid-metal connector.

12. (Original) The system of claim 1, further comprising a support positioned inside the vacuum chamber, wherein the rotatable tube is continually supported by the support.

13. (Currently amended) A system for coating a substrate, the system comprising:

a rotatable magnetron;

a vacuum chamber configured to house the rotatable magnetron;

[[a]]at least one bearing configured to rotatably engage the rotatable magnetron, wherein the at least one bearing is positioned outside the vacuum chamber, and wherein the at least one bearing is a closest bearing, measured along an axis of the rotatable magnetron, to a first side of the vacuum chamber;

a seal positioned between the at least one bearing and the vacuum chamber; and

a power coupler configured to deliver power to the rotatable magnetron, wherein the power coupler is positioned closer, measured along an axis of the rotatable magnetron, to a center of the vacuum chamber than the at least one bearing to thereby limit the current that flows through the at least one bearing. ~~between the bearing and the seal.~~

14. (Canceled)

15. (Original) The system of claim 13, wherein the power coupler is positioned inside the vacuum chamber.

16. (Currently amended) A system for coating a substrate, the system comprising:

a vacuum chamber;

a rotatable tube positioned inside the vacuum chamber;

a shaft connected to the rotatable tube, the shaft partially outside at least a first side of the vacuum chamber;

[[a]]at least one bearing positioned outside the vacuum chamber, the at least one bearing configured to rotatably engage the shaft, wherein the at least one bearing is a closest bearing, measured along an axis of the shaft, to the first side of the vacuum chamber; and

a liquid-metal electrical connector positioned between the at least one bearing and the rotatable tube and engaged with the shaft, the liquid-metal electrical connector configured to deliver power to the rotatable tube.

17. (Currently amended) The system of claim 16, wherein the at least one bearing is a non-metallic bearing.

18. (Currently amended) The system of claim 16, wherein the liquid-metal electrical connector is positioned to limit the current that flows through the at least one bearing.

19. (Currently amended) A system for coating a substrate, the system comprising:

a rotatable target, wherein the rotatable target comprises a first end, a second end and a midpoint between the first end and the second end;

[[a]]at least one bearing configured to rotatably engage the rotatable target, wherein the at least one bearing is a closest bearing to the midpoint between the first end and the second end of the rotatable target; and

a liquid-metal electrical connector configured to deliver power to the rotatable target, wherein the liquid-metal electrical connector is positioned between the at least one bearing and the midpoint between the first end and the second end of the rotatable target to limit the current that flows through the at least one bearing.

20. (Canceled)

21. (New) The system of claim 1, wherein the power coupler is positioned between the at least one bearing and the seal.

22. (New) The system of claim 13, wherein the power coupler is positioned between the at least one bearing and the seal.